## DUCKCREEK

## Golden Anniversary Renovation

## Brother From A Different Mother: A Hooded Merganser's Tale

As ducks and geese are heading back north towards the breeding grounds, some have already reached their destination and have started nesting...and these birds may be closer than you might think. Wood Ducks and Hooded Mergansers are two species that breed in Missouri, specifically at Duck Creek CA and Mingo NWR.

Researchers at Gaylord Memorial Laboratory (the old University of Missouri research extension, 1956-2006) collected data on breeding Wood Ducks and Hooded Mergansers for years. Some data is still being collected today by MDC. Because of the many years of data, we've learned some cool stuff about our resident birds. So today I figured I'd tell you about one of these stories.

Wood Ducks and Hooded Mergansers start to lay eggs in late February through March. The incubation period for both species is identical. This is an interesting nugget of information that has some pretty big implications.

Some waterfowl species participate in brood parasitism. This sounds pretty nasty, but essentially it is an easy way out for a female to drop off their parenting responsibilities, literally, by laying eggs in the nest of another bird. This way they don't have to spend the extra time to incubate and care for the young, but are still able to produce offspring.

Wood Ducks and Hooded Mergansers both nest in tree cavities or simulated tree cavities called nest boxes. Both species are known to take part in these activities and will dump eggs in other cavity nests.

Researchers that were checking nest boxes noticed that Hooded Mergansers seemed to do this to Wood Ducks at a higher rate (about 5.1 Hooded Merganser eggs in Wood Duck nests, compared to 3.6 Wood Duck eggs in Hooded Merganser nests). This seemed to be a little peculiar so the question was asked, "Is it beneficial for Hooded Mergansers to take advantage and dump a couple eggs in Wood Duck nests?".

Well, by banding the ducklings right before they left the nest box, we were able to learn something about the survival of these birds. Eventually, some of the ducks ended up on the wrong side of the gun and the banded birds fell into the laps of hunters. When the bands were reported, researchers were able to get an idea of survival and distribution of the population.

So let's go back to the first interesting nugget of information (same incubation period). If Hooded Merganser eggs were laid at the same time as the Wood Duck eggs, they would hatch at the same time. However, this is where the biology of the two species seems to split. Hooded Mergansers typically dive for food and go after invertebrates and fish. In contrast, Wood Ducks pick at foods (bugs and seeds) off of the surface of the water. So we go back to the original question, "Would it be beneficial for Hooded Mergansers to be raised by Wood Ducks, even if they forage differently?".



Well, apparently it does pay off. When researchers looked at the band return data, the survival rate of Hooded Merganser ducklings that hatched in Wood Duck nests was very similar to the survival rate of Hooded Mergansers that were raised by their own species. So it turns out that this is a successful behavior for Hooded Mergansers, which is something that we didn't know of before.

Anyway, I thought this was a neat example showing how data collected in our backyard brought more light to the breeding strategies of our two "resident" ducks and applies to understanding breeding populations. It is something to think about, next time you happen to have a banded bird in the hand. By reporting that information, you can help uncover some cool results. Well, thanks for being interested and I hope you learned a bit about what is going on in the "off-season" at Duck Creek.

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